```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
FILE 'USPAT' ENTERED AT 13:24:54 ON 28 AUG 96
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
  *            W E L C O M E   T O   T H E              *
  *         U. S.  P A T E N T   T E X T   F I L E      *
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
=> s electrical slip ring
       480406 ELECTRICAL
        79612 SLIP

       417287 RING

L1          86 ELECTRICAL SLIP RING
               (ELECTRICAL(W)SLIP(W)RING)
=> s electric slip ring
       368962 ELECTRIC
        79612 SLIP

       417287 RING

L2          11 ELECTRIC SLIP RING
               (ELECTRIC(W)SLIP(W)RING)
=> s l1 or l2
L3          95 L1 OR L2
=> s photodetect!r or (photo detect!r)

        16769 PHOTODETECT!R
        59842 PHOTO
       164434 DETECT!R
         4541 PHOTO DETECT!R
               (PHOTO(W)DETECT!R)
L4       19634 PHOTODETECT!R OR (PHOTO DETECT!R)
=> s l3 and l4
L5           1 L3 AND L4
=> d 1

1.  4,711,516, Dec. 8, 1987, Optical slip ring; David W. Graber, 385/26
[IMAGE AVAILABLE]
=> d 1 kwic

US PAT NO:     4,711,516 [IMAGE AVAILABLE]          L5: 1 of 1

DETDESC:

DETD(1)

 FIG. . . . and 46, respectively, extending between the slip ring
assembly and a control circuit 48 mounted in the steering wheel. An
**electrical** **slip** **ring** brush 50 is secured on the lock plate 32
adjacent the aperture 42 and aligned with the outer retainer ring. . .
the surface of the transparent ring 54 and is connected to the control
circuit 48 by the conductors 44. A **photodetector** assembly 60 mounted
on the transparent ring 56 is connected to conductors 62, which extend
down the steering column. The control circuit 48, thus, is powered
through the **electrical** **slip** **ring** arrangement and conductor
46. The control circuit interprets signals from actuators represented by
a push button switch 63 on the. . .
=>
```

08/401,229

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
```
FILE 'USPAT' ENTERED AT 13:24:54 ON 28 AUG 96
```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*              W E L C O M E    T O    T H E                 *
*         U. S.   P A T E N T   T E X T   F I L E            *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

```
=> s electrical slip ring
        480406 ELECTRICAL
         79612 SLIP

        417287 RING

L1           86 ELECTRICAL SLIP RING
                (ELECTRICAL(W)SLIP(W)RING)
=> s electric slip ring
        368962 ELECTRIC
         79612 SLIP

        417287 RING

L2           11 ELECTRIC SLIP RING
                (ELECTRIC(W)SLIP(W)RING)
=> s l1 or l2
L3           95 L1 OR L2
=> s photodetect!r or (photo detect!r)

         16769 PHOTODETECT!R
         59842 PHOTO
        164434 DETECT!R
          4541 PHOTO DETECT!R
                (PHOTO(W)DETECT!R)
L4        19634 PHOTODETECT!R OR (PHOTO DETECT!R)
=> s l3 and l4
L5            1 L3 AND L4
=> d 1

1.  4,711,516, Dec. 8, 1987, Optical slip ring; David W. Graber, 385/26
[IMAGE AVAILABLE]
=>
```